


Colorado State University




**Bark Beetles – Part 2**  
*Ips* spp. and more  
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**Outline**

- Bark beetles
- Ips beetle
  - Biology
  - Ecology
  - Signs and symptoms
  - Impacts
  - Management
- Twig beetle

**Bark Beetle Galleries**



Douglas-fir beetle  
*Dendroctonus pseudotsugae*  
 1/8-1/4 in.

Mountain pine beetle  
*Dendroctonus ponderosae*  
 1/8-1/3 in.

Western pine beetle  
*Dendroctonus brevicomis*  
 1/16-3/16 in.

Ips engraver beetle  
*Ips* sp.  
 1/3-1/4 in.

**Where bark beetles attack .....**




**Ips beetle**

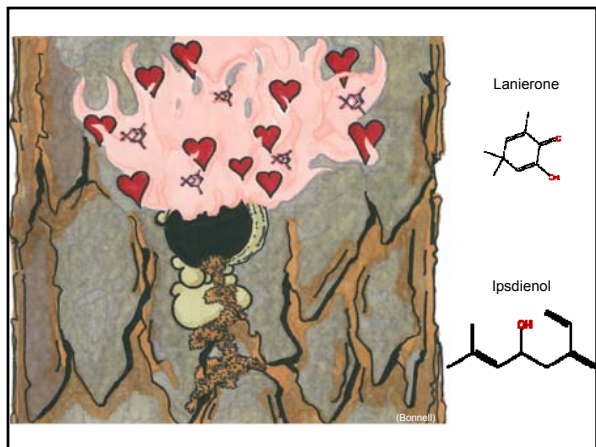
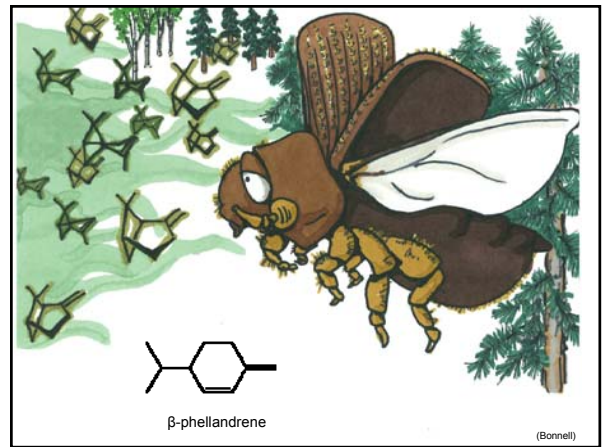
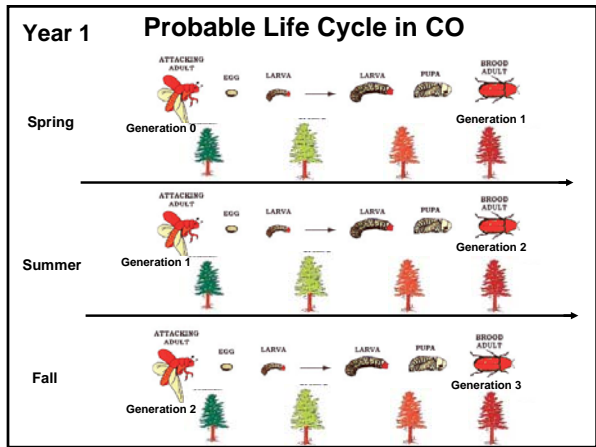
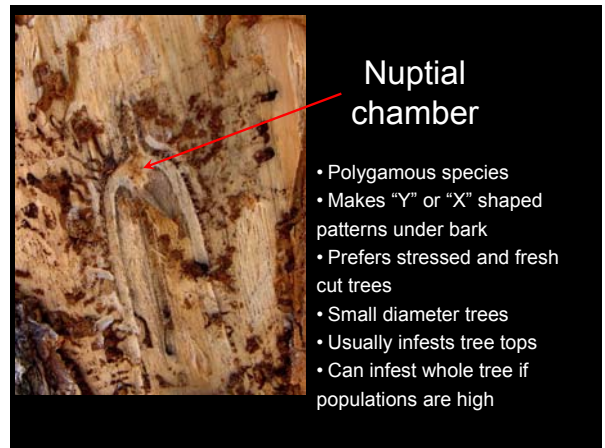
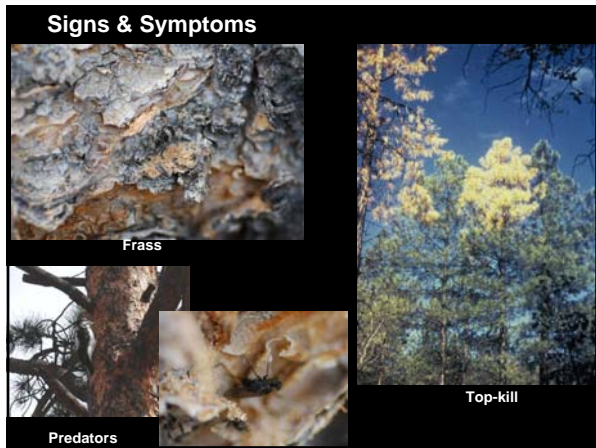
*Ips* spp. (25 in the West)  
*Ips pini*, Pine engraver  
*Ips confusus*, Pinyon Ips

Hosts: Variable by species

Life cycle: Multiple generations per year




"Spines"





## Ips Management and Thinning

- Conduct thinning in Sept.-Dec. (when possible)
- Monitor green slash and standing trees
  - especially if drought conditions
- Remove larger timber ( $\geq 4$  inches)
- If cutting during warmer months
  - treat slash (chipping)
- Avoid wounding of standing trees
- Remove standing infested trees
- Mass trapping

### Mass Trapping

- Lindgren funnel traps
- Clusters of 2-3 traps per location (5-6 acre)
- Empty traps every week
- Set before beetles fly
- Lure (bait), change ~60 days
  - Ipsdienol ✓
  - Ipsdienol + lanierone (?)
  - Ipsdienol + LP blend (?)



## Twig beetles

*Pityophthorus* spp., *Pityogenes* spp.



Thank you!

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